UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,085	11/26/2003	Joseph S. Glider	ARC920030081US1	7870

7590 03/20/2007 Frederick W. Gibb, III McGinn & Gibb, PLLC Suite 304 2568-A Riva Road Annapolis, MD 21401	**EXAMINER** WEI, ZHENG

ART UNIT	PAPER NUMBER
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/723,085	GLIDER ET AL.
	Examiner	Art Unit	
	Zheng Wei	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-11,13 and 15-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-11,13 and 15-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   This office action is in response to the amendment filed on 12/12/2006.

2.   Claims 6, 12, 14 and 20 have been canceled.

3.   Claims 1, 3, 7, 9, 13, 15 and 17 have been amended.

4.   The 35 U.S.C. 112 second paragraph rejection of claims 3-5 are withdrawn in view of the Applicant's amendment.

5.   Claims 1-5, 7-11, 13 and 15-19 remain pending and have been examined.

Oath/Declaration

6.   The Oath/Declaration filed on 09/27/2006 has been accepted and put in the application file. Therefore, the objection is withdrawn.

Information Disclosure Statement

7.   The information disclosure statements filed on 09/27/2006 has been placed in the application file and but this is a duplicate IDS of previous one filed on 11/26/2003, which the information referred to therein has already been considered.

Specification

8.   Applicant requested to substitute paragraph [0038] on page 14, lines 4-11 of the

specification with a new paragraph filed on 12/12/2006. However, there are no

changes between these two versions. Therefore, the new specification paragraph

is not entered.

Response to Arguments

9.   Applicant's arguments filed on 12/12/2006, in particular on pages 10-13, has

been fully considered but they are not persuasive. For example:

- At page 10 third paragraph – page 12, first paragraph, Applicant contends

   that software downgrade feature in claims 1, 7, 13 and 15 (previous claims 6,

   12, 14 and 20) are patentably distinguishable from the prior art (Moore et al.,

   US 2003.0092438), wherein Moore only performs a single level downgrade

   and in Applicant's claimed invention, there is a two-level downgrade.

   However, the examiner strongly disagrees. As to previous Office action,

   paper number 6, examiner pointed out at Figure 3 and Figure 4 that Moore,

   indeed, discloses the feature of two–level downgrade (see for example,

   Figure 3, step 110 to 112 DOWNGRADE action, step 112, convert state data

   to old version and Figure 4, step 118 to 122 DOWNGRADE action and also

   see related text description in paragraph [0023] and [0024])

- At page 12, second paragraph Applicant further pointed out that Moore does

   not support two-level downgrade, because Moore does not have two software

version number corresponding to two-level upgrades/downgrades. The

Examiner disagrees with that. Because, two-level downgrade is just a two-

level downgrading procedure for downgrading software from current version

to previous version as Applicant disclosed in Figure 5, steps 140-160.

Therefore, Moore does disclose the version for the two-level

upgrade/downgrade (see for example, Figure 3,5 steps 110, 118 and related

text, also see paragraph [0023], "With the results of the version comparison, a

step 110 determines whether the change in the secondary application was an

upgrade, a downgrade or no change...")

- At page 12, third paragraph – page 13, first paragraph, Applicant asserts that

there is no motivation to combine prior art reference Sinander (Niklas

Sinander, US 6,385770) with Moore. Because there is no indication in

Sinander of how its system and method would operate in a downgrading

process and those prior art references come from different classifications

(Sinander is classified in 717 and Moore is classified in 455). It should be

noted that although these prior art references come from different

classification, however both of them in fact concerned the same software

upgrade/downgrade subject matters. Moreover, Moore discloses software

upgrade/downgrade for network nodes in communication network (see for

example, p.1, paragraph [0001], "for stabilizing voice and data call within a

mobile telephony system which allows for an enhanced application upgrade

or downgrade feature") and Sinander discloses software upgrade (see for

example, ABSTRACT, "for efficient upgrading of a software system by a

plurality of versions."). Therefore, the Examiner reasserts that Sinander and

Moore are, indeed, in the same analogous art for software upgrading and/or

downgrading as set forth of record.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11.   Claim 1-5, 7-11, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Moore (Moore et al., US 2003/0092438) in the view of

Sinander (Niklas Sinander, US 6,385,770 B1)

Claim 1, 7,13 and 15:

Moore discloses a method and apparatus for revising a software application used

by aplurality of nodes in a computer network, wherein said software aplication

utilizes persistent data, siad method comprisong:

- Applying an upgrade to a next level of software (see for example, Fig.4,
  step 118-120, UPGRADE and related text)
- Converting all persistent data structures to new version format (see for
  example, Fig.4, step 120 CONVERT STAE DATA TO NEW VERSION
  FORMAT and related text)

- Applying a downgrade to a previous level of software. (see for example, Fig.3, items 102 and related text)
- Converting all persistent data structures into the old persistent data structure format. (see for example Fig.3, item 112 and related text)
- Applying a downgrade to a second previous level of software that understands said old persistent data structure formats. (Fig.4, items 116-122)

But does not disclose two-level software upgrade. However, <u>Sinander</u> in the same analogous art of software upgrade discloses a method and system for upgrading a software application utilizes all kinds of data, said method and system comprising:

- Applying an upgrade to a first part of an upgrade framework to upgrade system software; (Col 3, Lines 54-58)
- Executing a plurality of upgrade contents to convert data structure; (Col2, Lines 6-16)
- Applying an upgrade to a second part of the upgrade frame to upgrade system software; (Col 3, Lines 54-58)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use <u>Sinander</u>'s upgrade method combine with <u>Moore</u>'s software upgrade/downgrade method. One would have been motivated to integrate <u>Sinander</u>'s upgrade method to Moore's upgrade method as suggested by <u>Sinander</u> (see for example, ABSTRACT, "The invention alows to upgrade a software system in a real-time environment using a source system opratintg with an old software version and a target system for operating with the new software version and allows to handle static as well as dynamic data")

<u>Claim 2, 8 and 16</u>:

Sinander and Moore disclose a system and method to upgrade software
application utilizes persistent data as in claims 1, 7, and 15 above, but does not
explicitly disclose that the persistent data sructures comprise communication
packet structures. However, Sinander further discloses the system and method
for software upgrade could be used in a real time applications of
telecommunicaitons network (Col1, Line41-44) and switch communication links
(Col2, Line36). That would have been obvious to one having ordinary skill in the
art at time the invention was made to undersand that these networks, like ATM,
IP networks use packet (ATM cells or IP packet) for communication based on
different kinds of network protocols. Therefore, one would have been motivated
to use persistent data structure to represent the packet structure in software
programming in order to make software implementation simpler and easier.

Claim 3, 9 and 17:
Sinander and Moore disclose a system and method to upgrade software
application as in claims 2, 8 and 16 above and Sinander further discloses that the
distributed system including a plurality of nodes (Co.10, lines 47-50, "In case the
source system is operating a mobile telephone network, the devices may be
mobile telephones or nodes of the network.") holding non-volatile memory data
structure. (Col.6, lines 36-48),

Claims 4, 10 and 18:
Sinander and Moore disclose a system and method to upgrade software
application as in claims 3, 9 and 17 above and Sinander also discloses that said
nodes communicate with one another. (Col.10, lines 47-50, "In case the source
system is operating a mobile telephone network, the devices may be mobile
telephones or nodes of the network."). Therefore, it is obvious for a person with
ordinary skill in the art at time the invention was made to understand that the
"mobile telephone or nodes of the network" can communicate to each other.

<u>Claims 5, 11 and 19</u>:

<u>Sinander</u> and <u>Moore</u> disclose a system and method to upgrade software application as in claims 4, 10 and 18 above and <u>Sinander</u> further discloses that said nodes communicate with one another. (Col.10, lines 47-50, "In case the source system is operating a mobile telephone network, the devices may be mobile telephones or nodes of the network."). Therefore, it would have been obvious to one having ordinary skill in the art at time the invention was made to understand that said nodes, like mobile telephones or nodes in networks can use communication packet to communicate between each other.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13.   Applicant's arguments with respect to claims rejection have been considered but are moot in view of the new grounds of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-02059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

ZW

TUAN DAM
SUPERVISORY PATENT EXAMINER